



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

AUGUST 28, 2000

PTAS
SUGHRUE, MION, ZINN, MACPEAK & SEAS
DARRYL MEXIC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, D.C. 20037-3202



101400688A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 06/13/2000

REEL/FRAME: 010899/0882

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

KUWATA, NAOKI

DOC DATE: 05/16/2000

ASSIGNOR:

NAKAMI, YOSHIHIRO

DOC DATE: 05/16/2000

ASSIGNEE:

SEIKO EPSON CORPORATION
4-1, NISHI-SHINJUKU 2-CHOME,
SHINJUKU-KU
TOKYO, JAPAN

SERIAL NUMBER: 09581437

FILING DATE: 06/13/2000

PATENT NUMBER:

ISSUE DATE:

010899/0882 PAGE 2

PAULA MCCRAY, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

Q58651

RECORDATION FORM COVER SHEET

PATENTS ONLY

To the Honorable Assistant Commissioner for Patents. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
Naoki KUWATA and Yoshihiro NAKAMI

Additional name(s) of conveying party(ies) attached?
☐ yes ☒ no

2. Name and address of receiving party(ies)?

Name:
SEIKO EPSON CORPORATION
Internal Address:
4-1, Nishi-shinjuku 2-chome, Shinjuku-ku, Tokyo, Japan
Street Address:
Same as above

City State Zip

Additional name(s) & address(es) attached?
☐ yes ☒ no

3. Nature of Conveyance:

☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

Execution Date: May 16, 2000

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:
May 8, 2000

A. Patent Application No.(s)

B. Patent No(s).

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Suite 800
Washington, D.C. 20037-3202

6. Total number of applications and patents involved:
One (1)

7. Total Fee (37 CFR 3.41): \$ 40.00
☒ Enclosed. Please charge any underpayment in connection with this Assignment to Deposit Account No. 19-4880.

☐ Authorized to be charged to Deposit Account

8. Deposit Account No.

(Attach dupl. copy of this page if paying by Deposit Account)

DO NOT WRITE IN THIS SPACE

9. Statement and Signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Darryl Mexic
Name Darryl Mexic Reg. No. 23,063

June 13, 2000
Date

TOTAL NUMBER OF PAGES INCLUDING COVER SHEET, ATTACHMENTS AND DOCUMENT: 3

OMB No. 0651-0011 (exp. 4/94)

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:
Assistant Commissioner for Patents
Box Assignments
Washington, D.C. 20231

譲渡証 (Translation/日本語訳)

下記に署名した私/私達、

鍛田 直樹 および 中見 至宏 は、

ある発明を創出し、これについて合衆国特許出願は

- ☐ ここに私/私達により署名され、
☒ 2000年5月8日に私/私達により（それぞれ）署名され、
☐ _____に出願され、出願番号 _____ が交付され、
☒ PCT 国際出願 PCT/JP99/05582 として 1999年10月8日に出願され、

その発明は

画像データ補間方法、画像データ補間装置および画像データ補間プログラムを記録した媒体

という名称である。そして、ここにその受領を認める対価で：私/私達は、当該発明/出願について、合衆国とその属領及び全ての外国に於ける全面的かつ独占的な権利；合衆国とその属領及び全ての外国に於いて発行される特許証に関わる全ての権利、所有権、利益；一部継続出願、継続出願、分割出願、差替え出願、再発行出願、特許期間延長等、合衆国とその属領及び全ての外国に於いて既に出願されたか若しくは今後出願される特許に関わる全ての権利；そして、国際条約、同盟、契約、法令、協定（将来制定されるものを含む）に基づく全ての優先権を伴う一切の権利；を、日本国東京都新宿区西新宿2丁目4番1号に住所を有するセイコーエプソン株式会社、その後継者、譲受人及び法定代理人に対して、売却、譲渡、移転するものとする。

さらに、私/私達は、セイコーエプソン株式会社（以下譲受人と書く）が単数ないしは複数の当該発明（以下当該発明という）に関わる特許権を、自己の名により、合衆国とその属領及び全ての外国に於いて出願し、特許を受けること；またこの譲渡証の意図と目的を誠実に実行することを求められた場合、下記に署名した私/私達が、当該譲受人、その後継者、その被譲渡者、及び法定代理人の費用負担にて、一部継続出願、継続出願、分割出願、差替え出願、再発行出願、特許期間延長等を行い、合法的宣誓書、譲渡証、委任状等の書類を作成し、あらゆる法的または準法的訴訟手続に於いて証言を行うこと；当該発明とその経緯に関連して、下記に署名した私/私達が知り得た全ての事実を、当該譲受人、後継者、被譲渡者、及び法定代理人に連絡すること；そして当該譲受人、後継者、被譲渡者、及び法定代理人が、当該発明の特許権の適切な保護、維持、権利行使するために望ましいと考慮すること、また、当該発明に関わる特許出願に際し、当該譲受人、後継者、被譲渡者、及び法定代理人に対して法的権限を付与することが望ましいと考慮することについて、可能な限り行うことを承諾する。

Assignment

For good and valuable consideration, the receipt of which is hereby acknowledged, I/WE, the undersigned,

Naoki KUWATA and Yoshihiro NAKAMI,

who have created a certain invention for which an application for United States Letters Patent

- ☐ executed by ME/US on even date herewith,
☒ executed by ME/US on May 8, 2000, (respectively).
☐ filed on _____ and assigned Serial No. _____,
☒ filed as International Application No. PCT/JP99/05582 filed on October 8, 1999.

and entitled:

IMAGE DATA INTERPOLATING METHOD, IMAGE DATA INTERPOLATING APPARATUS AND MEDIUM ON WHICH IMAGE DATA INTERPOLATING PROGRAM IS RECORDED

Do hereby sell, assign and transfer to Seiko Epson Corporation, a corporation of Japan, having a place of business at 2-4-1, Nishi-shinjuku 2-chome, Shinjuku-ku, Tokyo, Japan, its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Agree that Seiko Epson Corporation, hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives, the undersigned will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, its successors, assigns, or legal representatives; and

A / D 581,40

09/581437

Form PTO-1595

1-31-93

Q58651

07-12-2000



101400688

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

PCT/PTO 13 JUN 2000

To the Honorable Assistant Commissioner for Patents, please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
Naoki KUMATA and Yoshihiro NAKAMIAdditional name(s) of conveying party(ies) attached?
☐ yes ☒ no

3. Nature of Conveyance:

☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

Execution Date: May 16, 2000

2. Name and address of receiving party(ies)?

Name:
SEIKO EPSON CORPORATION
Internal Address:
4-1, Nishi-shinjuku 2-chome, Shinjuku-ku, Tokyo, Japan
Street Address:
Same as above

City State Zip

Additional name(s) & address(es) attached?
☐ yes ☒ no

4. Application number(s) or patent number(s):

09581437

If this document is being filed together with a new application, the execution date of the application is:
May 8, 2000

A. Patent Application No.(s)

B. Patent No(s).

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Suite 800
Washington, D.C. 20037-32026. Total number of applications and patents involved:
One (1)7. Total Fee (37 CFR 3.41): \$ 40.00
☒ Enclosed. Please charge any underpayment in connection with this Assignment to Deposit Account No. 19-4880.☐ Authorized to be charged to Deposit Account

8. Deposit Account No.

(Attach dupl. copy of this page if paying by Deposit Account)

DO NOT WRITE IN THIS SPACE

9. Statement and Signature.

06/11/2000 MCLAYBRO 00000030 09581437

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

40.00 DP

Name Darryl Mexic Reg. No. 23,063

June 13, 2000
Date

TOTAL NUMBER OF PAGES INCLUDING COVER SHEET, ATTACHMENTS AND DOCUMENT: 3

OMB No. 0651-0011 (exp. 4/94)

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:
Assistant Commissioner for Patents
Box Assignments
Washington, D.C. 20231

譲渡証 (Translation/日本語訳)

下記に署名した私/私達、

鎌田 直樹 および 中見 至宏 は、

ある発明を創出し、これについて合衆国特許出願は

- ☐ ここに私/私達により署名され、
☒ 2000年5月8日に私/私達により(それぞれ)署名され、
☐ _____に出願され、出願番号_____が交付され、
☒ PCT国際出願PCT/JP99/05582として1999年10月8日に出願され、

その発明は

画像データ補間方法、画像データ補間装置および画像データ補間プログラムを記録した媒体

という名称である。そして、ここにその受領を認める対価で：私/私達は、当該発明/出願について、合衆国とその属領及び全ての外国に於ける全面的かつ独占的な権利；合衆国とその属領及び全ての外国に於いて発行される特許証に関わる全ての権利、所有権、利益；一部継続出願、継続出願、分割出願、差替え出願、再発行出願、特許期間延長等、合衆国とその属領及び全ての外国に於いて既に出願されたか若しくは今後出願される特許に関わる全ての権利；そして、国際条約、同盟、契約、法令、協定(将来制定されるものを含む)に基づく全ての優先権を伴う一切の権利；を、日本国東京都新宿区西新宿2丁目4番1号に住所を有するセイコーエプソン株式会社、その後継者、譲受人及び法定代理人に対して、売却、譲渡、移転するものとする。

さらに、私/私達は、セイコーエプソン株式会社(以下譲受人と言う)が単数ないしは複数の当該発明(以下当該発明という)に関わる特許権を、自己の名により、合衆国とその属領及び全ての外国に於いて出願し、特許を受けること；またこの譲渡証の意図と目的を誠実に実行することを求められた場合、下記に署名した私/私達が、当該譲受人、その後継者、その被譲渡者、及び法定代理人の費用負担にて、一部継続出願、継続出願、分割出願、差替え出願、再発行出願、特許期間延長等を行い、合法的宣誓書、譲渡証、委任状等の書類を作成し、あらゆる法的または準法的訴訟手続に於いて証言を行うこと；当該発明とその経緯に関連して、下記に署名した私/私達が知り得た全ての事実を、当該譲受人、後継者、被譲渡者、及び法定代理人に連絡すること；そして当該譲受人、後継者、被譲渡者、及び法定代理人が、当該発明の特許権の適切な保護、維持、権利行使するために望ましいと考慮すること、また、当該発明に関わる特許出願に際し、当該譲受人、後継者、被譲渡者、及び法定代理人に対して法的権限を付与することが望ましいと考慮することについて、可能な限り行うことを承諾する。

Assignment

For good and valuable consideration, the receipt of which is hereby acknowledged, I/WE, the undersigned,

Naoki KUWATA and Yoshihiro NAKAMI,

who have created a certain invention for which an application for United States Letters Patent

- ☐ executed by ME/US on even date herewith,
☒ executed by ME/US on May 8, 2000, (respectively),
☐ filed on _____ and assigned Serial No. _____,
☒ filed as International Application No. PCT/JP99/05582 filed on October 8, 1999,

and entitled:

IMAGE DATA INTERPOLATING METHOD, IMAGE DATA INTERPOLATING APPARATUS AND MEDIUM ON WHICH IMAGE DATA INTERPOLATING PROGRAM IS RECORDED

Do hereby sell, assign and transfer to Seiko Epson Corporation, a corporation of Japan, having a place of business at 4-1, Nishi-shinjuku 2-chome, Shinjuku-ku, Tokyo, Japan, its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Agree that Seiko Epson Corporation, hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives, the undersigned will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, its successors, assigns, or legal representatives; and

そして、私/私達は、この書面により譲渡された権利や財産に影響する、如何なる譲渡、授権、抵当権、ライセンス等その他の協定も他の第三者との間で行っていないこと；下記に署名した私/私達によって、この書面に記載されている権利が所有されていることを、当該譲受人、後継者、被譲渡者、及び法定代理人に対して誓約するものである。

さらに、下記に署名した私/私達はこの譲渡書は英語の部分の表現によってのみ解釈されることに同意する。

上記を証明するため、私/私達は下記日付で署名する。

Covenant with said Assignee, its successors, assigns, or legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

I/WE, the undersigned do further agree that this Assignment is to be construed solely according to the terms of the English language portions thereof.

IN TESTIMONY WHEREOF I/WE have hereunto set MY/OUR signature seal on the date indicated below.

唯一または第一発明者名 鍛田 直樹		Full name of sole or first inventor Naoki KUWATA	
発明者の署名 鍛田 直樹	日付 2000年5月16日	Inventor's signature Naoki Kuwata	Date May 16, 2000
第二共同発明者 (いる場合) 中見 至宏		Full name of second joint inventor, if any Yoshihiro NAKAMI	
第二共同発明者の署名 中見 至宏	日付 2000年5月16日	Second Inventor's signature Yoshihiro Nakami	Date May 16, 2000
第三共同発明者 (いる場合)		Full name of third joint inventor, if any	
第三共同発明者の署名	日付	Third Inventor's signature	Date
第四共同発明者 (いる場合)		Full name of fourth joint inventor, if any	
第四共同発明者の署名	日付	Fourth Inventor's signature	Date
第五共同発明者 (いる場合)		Full name of fifth joint inventor, if any	
第五共同発明者の署名	日付	Fifth Inventor's signature	Date
第六共同発明者 (いる場合)		Full name of sixth joint inventor, if any	
第六共同発明者の署名	日付	Sixth Inventor's signature	Date
第七共同発明者 (いる場合)		Full name of seventh joint inventor, if any	
第七共同発明者の署名	日付	Seventh Inventor's signature	Date
第八共同発明者 (いる場合)		Full name of eighth joint inventor, if any	
第八共同発明者の署名	日付	Eighth Inventor's signature	Date

2nd/TEROCT

09/581437



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

U.S. APPLICATION NO.	437	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
2100 PENNSYLVANIA AVENUE NW			
WASHINGTON DC 20037-5202			

SUGHRUE MION ZINN MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20037-5202

JUL 18 2000

NOTIFICATION OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C. 371
AND 37 CFR 1.494 OR 1.495

INTERNATIONAL APPLICATION NO.	058651
INT. FILING DATE	PRIORITY DATE
10/08/99	10/13/98
DATE MAILED:	07/14/00

1. The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as Designated Office (37 CFR 1.494), ☒ an Elected Office (37 CFR 1.495), has determined that the above identified international application has met the requirements of 35 U.S.C. 371, and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.

2. The United States Application Number assigned to the application is shown above and the relevant dates are:

13 June 2000 DATE OF RECEIPT OF
35 U.S.C. 102(c) DATE
13 June 2000 DATE OF RECEIPT OF
35 U.S.C. 371 REQUIREMENTS

A Filing Receipt (PTO-103X) will be issued for the present application in due course. THE DATE APPEARING ON THE FILING RECEIPT AS THE "FILING DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371(c) REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN ABOVE. The filing date of the above identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363). Once the Filing Receipt has been received, send all correspondence to the Group Art Unit designated thereon.

3. ☐ A request for immediate examination under 35 U.S.C. 371(f) was received on _____ and the application will be examined in turn.
4. The following items have been received:
☒ U.S. Basic National Fee.
☒ Copy of the international application in: